

Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketthrough~~. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicant reserves the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A turbine, comprising:  
a swivel-mounted rotationally symmetrical rotor;  
a compressor mounted along the rotor;  
a combustion chamber mounted along the rotor;  
a turbine section mounted along the rotor and formed of a plurality of turbine stages  
in which each turbine stage comprises mutually interacting blades and vanes which are surrounded by a flow of hot working fluid; and  
a coolant provided by the compressor for cooling the blades and the vanes, the coolant flowing in a channel along the rotor from the compressor to the turbine section and into which a liquid is adapted to be introduced for cooling, wherein the channel extends outside the rotor such that the liquid is introduced into the channel in a region close to the compressor,  
wherein a flow channel downstream of the compressor outlet in the direction of flow of the compressor air contains a diffuser rib passing through said flow channel,  
wherein a radially external end of the diffuser rib is secured on the stator of the turbine and the radially internal end opposite the external end faces the rotor,  
wherein at least one rib is hollow and a pipe runs in the rib, the pipe communicating on a stator side with a source of liquid and on the rotor side with a nozzle used to introduce the liquid in the annular channel.
2. (previously presented) A turbine according to Claim 1, wherein the channel runs along the rotor and that the rotor is cooled by the coolant.

3. (previously presented) A turbine according to Claim 1, wherein the channel is an annular channel formed coaxially to the rotor and through which the coolant flows, a torque-proof and thermally insulating external wall of the channel radially facing the combustion chamber.

4. (currently amended) A turbine according to Claim 1, wherein ~~the~~ a torque-proof internal channel wall is spaced from the surface of the rotor.

5. (previously presented) A turbine according to Claim 1, wherein the liquid is introduced into the annular channel by a nozzle.

6. (previously presented) A turbine according to Claim 1, wherein the liquid is water.

7. (previously presented) A turbine according to Claim 1, wherein the coolant is c outlet air from the compressor.

8. (canceled).

9. (canceled).

10. (currently amended) A turbine according to Claims 1, wherein the an internal wall and the external channel wall are supported by support ribs on an internal housing of the turbine.

11. (canceled).

12. (previously presented) A gas turbine with a turbine comprising:  
a swivel-mounted rotationally symmetrical rotor;  
a compressor mounted along the rotor;  
a combustion chamber mounted along the rotor;

a turbine section mounted along the rotor formed of a plurality of turbine stages  
in which each turbine stage comprises mutually interacting blades and vanes which are surrounded by a flow of hot working fluid; and  
a coolant provided by the compressor for cooling the blades and the vanes, the coolant flowing in a channel along the rotor from the compressor to the turbine section and into which a liquid is adapted to be introduced for cooling, wherein the channel extends outside the rotor, and the liquid is introduced into the channel in a region close to the compressor,  
wherein a flow channel downstream of the compressor outlet in the direction of flow of the compressor air contains a diffuser rib passing through said flow channel,  
wherein a radially external end of the diffuser rib is secured on the stator of the turbine and the radially internal end opposite the external end faces the rotor,  
wherein at least one rib is hollow and a pipe runs in the rib, the pipe communicating on a stator side with a source of liquid and on the rotor side with a nozzle used to introduce the liquid in the annular channel.

13. (previously presented) A turbine according to Claim 1, wherein the turbine is a gas turbine.

14. (previously presented) A turbine according to Claim 2, wherein the channel is an annular channel formed coaxially to the rotor and through which the coolant flows, a torque-proof and thermally insulating external wall of the channel radially facing the combustion chamber.

15. (currently amended) A turbine according to Claim 2, wherein the a torque-proof internal channel wall is spaced from the surface of the rotor.

16. (previously presented) A turbine according to Claim 2, wherein the liquid is introduced into the annular channel by a nozzle.

17. (previously presented) A turbine according to Claim 6, wherein the liquid is distilled water.

18. (previously presented) A turbine according to Claim 2, wherein the coolant is outlet air from the compressor.

19. and 20. (canceled).

21. (new) A turbine, comprising:  
a rotationally supported rotor shaft having an axis of rotation along a longitudinal axis of the rotor;  
a compressor arranged concentric with and surrounding the rotor;  
an annular flow channel arranged concentric with the rotor and downstream of an outlet of the compressor with respect to a flow direction of a working fluid of the turbine, the annular flow channel having a hollow diffuser rib passing through the flow channel, wherein  
a radially external end of the diffuser rib is secured on a stator of the turbine and a radially internal end opposite the external end faces the rotor, and a liquid coolant supply pipe runs within the hollow rib to introduce the liquid into the annular channel;  
a combustion chamber arranged concentric with the rotor and downstream of the compressor; and  
a turbine section arranged along the rotor and formed from a plurality of turbine stages in which each turbine stage comprises mutually interacting blades and vanes surrounded by a flow of the working fluid.